

# SEQUENCE LISTING

<110> Pharmacia Corporation  
Griggs, David W  
Head, Richard D  
Mazzarella, Richard A  
Weinstein, Edward J

<120> ESM-1 GENE DIFFERENTIALLY EXPRESSED IN ANGIOGENESIS, ANTAGONISTS  
THEREOF, AND METHODS OF USING THE SAME

<130> 01189/2

<150> 60/392,784

<151> 2002-07-01

<160> 19

<170> PatentIn version 3.2

<210> 1

<211> 555

<212> DNA

<213> Homo sapiens

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ccgcgctgca agaggacagt gctcgacgac tgtggctgct gccgagtgtg cgctgcaggg	180
cggggagaaa cttgctaccg cacagtctca ggcatggatg gcatgaagtg tggcccgggg	240
ctgaggtgtc agccttctaa tggggaggat ccttttggtg aagagtgttg tatctgcaa	300
gactgtccct acggcacctt cgggatggat tgcagagaga cctgcaactg ccagtcaggc	360
atctgtgaca gggggacggg aaaatgcctg aaattcccct tcttccaata ttcagtaacc	420
aagtcttcca acagatttgt ttctctcacg gagcatgaca tggcatctgg agatggcaat	480
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<210> 2

<211> 184

<212> PRT

<213> Homo sapiens

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Val	Ala	Ala	Trp	Ser	Asn	Asn	Tyr	Ala	Val	Asp	Cys	Pro	Gln	His	Cys
			20					25						30	

Asp Ser Ser Glu Cys Lys Ser Ser Pro Arg Cys Lys Arg Thr Val Leu  
 35 40 45

Asp Asp Cys Gly Cys Cys Arg Val Cys Ala Ala Gly Arg Gly Glu Thr  
 50 55 60

Cys Tyr Arg Thr Val Ser Gly Met Asp Gly Met Lys Cys Gly Pro Gly  
 65 70 75 80

Leu Arg Cys Gln Pro Ser Asn Gly Glu Asp Pro Phe Gly Glu Glu Phe  
 85 90 95

Gly Ile Cys Lys Asp Cys Pro Tyr Gly Thr Phe Gly Met Asp Cys Arg  
 100 105 110

Glu Thr Cys Asn Cys Gln Ser Gly Ile Cys Asp Arg Gly Thr Gly Lys  
 115 120 125

Cys Leu Lys Phe Pro Phe Phe Gln Tyr Ser Val Thr Lys Ser Ser Asn  
 130 135 140

Arg Phe Val Ser Leu Thr Glu His Asp Met Ala Ser Gly Asp Gly Asn  
 145 150 155 160

Ile Val Arg Glu Glu Val Val Lys Glu Asn Ala Ala Gly Ser Pro Val  
 165 170 175

Met Arg Lys Trp Leu Asn Pro Arg  
 180

<210> 3  
 <211> 65  
 <212> PRT  
 <213> Homo sapiens

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Val Asp Cys Pro Gln His Cys Asp Ser Ser Glu Cys Lys Ser Ser Pro  
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Arg Cys Lys Arg Thr Val Leu Asp Asp Cys Gly Cys Cys Arg Val Cys  
 20 25 30

Ala Ala Gly Arg Gly Glu Thr Cys Tyr Arg Thr Val Ser Gly Met Asp  
 35 40 45

Gly Met Lys Cys Gly Pro Gly Leu Arg Cys Gln Pro Ser Asn Gly Glu

50 55 60

Asp  
65

<210> 4  
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<212> PRT  
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<400> 4

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Gly Cys Ala Glu Leu Val Val Leu Asp Gly Cys Gly Gly Cys Cys Pro  
20 25 30

Val Cys Ala Arg Gln Glu Gly Glu Pro Cys Gly Val Tyr Thr Pro Pro  
35 40 45

Cys Ala Pro Gly Gly Leu Arg Cys Asp Pro Pro Pro Gly Glu Glu  
50 55 60

<210> 5  
<211> 184  
<212> PRT  
<213> Rattus sp.

<400> 5

Met Lys Ser Leu Leu Leu Val Thr Thr Leu Leu Ile Pro Leu His Leu  
1 5 10 15

Gly Met Ala Trp Ser Ala Lys Tyr Ala Val Asp Cys Pro Glu His Cys  
20 25 30

Asp Asn Thr Glu Cys Arg Ser Ser Leu Arg Cys Lys Arg Thr Val Leu  
35 40 45

Asp Asp Cys Gly Cys Cys Gln Val Cys Ala Ala Gly Pro Gly Glu Thr  
50 55 60

Cys Tyr Arg Thr Val Ser Gly Met Asp Gly Val Lys Cys Gly Pro Gly  
65 70 75 80

Leu Lys Cys His Phe Tyr Ser Glu Glu Asp Asp Phe Gly Asp Glu Phe  
85 90 95

Gly Val Cys Lys Asp Cys Pro Tyr Gly Thr Phe Gly Met Asp Cys Lys  
100 105 110

Glu Thr Cys Asn Cys Gln Ser Gly Ile Cys Asp Arg Val Thr Gly Arg  
115 120 125

Cys Leu Asp Phe Pro Phe Phe Gln Tyr Ala Ala Ala Lys Ser Pro Ser  
130 135 140

Arg Thr Ser Ala Ser Gln Thr Glu Arg Asp Ala Ala Ser Gly Asp Gly  
145 150 155 160

Asn Ala Val Arg Glu Glu Ile Gly Asp Arg Asn Ala Ala Arg Pro Ser  
165 170 175

Val Met Lys Trp Leu Asn Pro Arg  
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<210> 6  
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<212> PRT  
<213> Mus musculus

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Met Lys Ser Leu Leu Leu Leu Thr Thr Leu Leu Val Pro Leu His Leu  
1 5 10 15

Gly Met Ala Trp Ser Ala Lys Tyr Ala Val Asp Cys Pro Glu His Cys  
20 25 30

Asp Lys Thr Glu Cys Arg Ser Ser Leu Arg Cys Lys Arg Thr Val Leu  
35 40 45

Asp Asp Cys Gly Cys Cys Gln Val Cys Ala Ala Gly Pro Gly Glu Thr  
50 55 60

Cys Tyr Arg Thr Val Ser Gly Met Asp Gly Val Lys Cys Gly Pro Gly  
65 70 75 80

Leu Lys Cys His Phe Tyr Ser Glu Glu Asp Asp Phe Gly Asp Glu Phe  
85 90 95

Gly Ile Cys Lys Asp Cys Pro Tyr Gly Thr Phe Gly Met Glu Cys Lys  
100 105 110

Glu Thr Cys Asn Cys Gln Ser Gly Ile Cys Asp Arg Val Thr Gly Arg  
115 120 125

Cys Leu Asp Phe Pro Phe Phe Gln Tyr Ala Ala Ala Lys Ser Pro Ser  
 130 135 140

Arg Thr Ser Ala Ser His Thr Glu Arg Asp Ser Ala Ser Gly Asp Gly  
 145 150 155 160

Asn Ala Val Arg Glu Glu Ile Gly Glu Gly Asn Ala Ala Arg Pro Ser  
 165 170 175

Val Met Lys Trp Leu Asn Pro Arg  
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<210> 7  
 <211> 21  
 <212> DNA  
 <213> Artificial

<220>  
 <223> human ESM-1 PCR forward primer

<400> 7  
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<210> 8  
 <211> 18  
 <212> DNA  
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<220>  
 <223> human ESM-1 PCR forward primer

<400> 8  
 tcagcgtgga tttaacca

18

<210> 9  
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<220>  
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 gcgtggattt aacca

15

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<210> 11  
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<212> DNA  
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<220>  
<223> Mouse PCR probe

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tgcccgactg gcaattg 17

<210> 12  
<211> 28  
<212> DNA  
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<220>  
<223> MOUSE PROBE

<400> 12  
aagtctcttt gcattccatc ccgaaggt 28

<210> 13  
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<212> DNA  
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<220>  
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<400> 13  
gtggactgcc ctcaacactg t 21

<210> 14  
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<212> DNA  
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<220>  
<223> HUMAN PROBE

<400> 14  
tcgagcactg tcctcttgca 20

<210> 15  
<211> 23  
<212> DNA  
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<220>  
<223> HUMAN PROBE

<400> 15  
cagtgagtgc aaaagcagcc cgc 23

<210> 16  
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<212> DNA  
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<220>  
<223> IN SITU PROBE

<400> 16  
ccatccatgc ctgagactgt gcggtagcaa gtttctcccc 40

<210> 17  
<211> 40  
<212> DNA  
<213> Artificial

<220>  
<223> INSITU PROBE

<400> 17  
gccatctcca gatgccatgt catgctccgt gagagaaaca 40

<210> 18  
<211> 40  
<212> DNA  
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<220>  
<223> INSITU PROBE

<400> 18  
caccaaaagg atcctcccca ttagaaggct gacacctcag 40

<210> 19  
<211> 165  
<212> PRT  
<213> Homo sapiens

<400> 19

Trp Ser Asn Asn Tyr Ala Val Asp Cys Pro Gln His Cys Asp Ser Ser  
1 5 10 15

Glu Cys Lys Ser Ser Pro Arg Cys Lys Arg Thr Val Leu Asp Asp Cys  
20 25 30

Gly Cys Cys Arg Val Cys Ala Ala Gly Arg Gly Glu Thr Cys Tyr Arg  
35 40 45

Thr Val Ser Gly Met Asp Gly Met Lys Cys Gly Pro Gly Leu Arg Cys  
50 55 60

Gln Pro Ser Asn Gly Glu Asp Pro Phe Gly Glu Glu Phe Gly Ile Cys  
65 70 75 80

Lys Asp Cys Pro Tyr Gly Thr Phe Gly Met Asp Cys Arg Glu Thr Cys  
85 90 95

Asn Cys Gln Ser Gly Ile Cys Asp Arg Gly Thr Gly Lys Cys Leu Lys  
100 105 110

Phe Pro Phe Phe Gln Tyr Ser Val Thr Lys Ser Ser Asn Arg Phe Val  
115 120 125

Ser Leu Thr Glu His Asp Met Ala Ser Gly Asp Gly Asn Ile Val Arg  
130 135 140

Glu Glu Val Val Lys Glu Asn Ala Ala Gly Ser Pro Val Met Arg Lys  
145 150 155 160

Trp Leu Asn Pro Arg  
165